

[illegible]

1		2		3		4		5		6		7		8	
JOB ORDER NO. 3-1213004		INDEX P		PLANT NO. X43		DRAWING NUMBER ED-305945		SHEET NO. 04 of 24		REV. NO. 00					
NOTES															
INSTALLATION NOTES: 1. CUSTOMER WIRING SHOWN DASHED. AMETEK FACTORY WIRING SHOWN SOLID. 2. EACH CABINET IS EQUIPPED WITH 90° DOOR STOPS AND PADLOCK TYPE DOOR HANDLES. 3. THE CABINET IS RATED IP41, WITH FRONT / REAR ACCESS & TOP / BOTTOM CABLE ENTRY. EXTERIOR FINISH: RAL7038 INTERIOR FINISH : RAL9003															
SERVICE NOTES: 1. THE TR-2000 SYSTEM IS WIRED FOR 32 ANALOG AND 128 DIGITAL CHANNELS. 2. THE TR-2000 HAS BEEN CONFIGURED AND CALIBRATED AT THE FACTORY AS FOLLOWS: CHANNELS VOLTAGE: REF. WIRING CHANNELS CURRENT: REF. WIRING 3. BOTH VOLTAGE INPUT AND CICT OUTPUTS ARE TO BE WIRED TO FT-19R VOLTAGE TEST SWITCHES. THE FULL-SCALE SIGNAL APPLIED TO THE TR-2000 INPUT FOR VOLTAGE CHANNELS IS 300V PEAK AND 2V PEAK FOR CURRENT CHANNELS. 4. CICT'S (CURRENT ISOLATOR CT) ARE PROVIDED LOOSE PIECE FOR CURRENT INPUTS. CICT OUTPUT IS 70.7mVAC (RMS) AT THE RATED NOMINAL INPUT (1A/5A AMPS). FULL-SCALE CURRENT IS 20 TIMES THE NOMINAL VALUE (20/100 AMPS). 5. TO CHANGE A CHANNEL FROM CURRENT TO VOLTAGE OR FROM VOLTAGE TO CURRENT, CHANGE THE JUMPER ON THE INPUT MODULE AND RE-CALIBRATE THE INPUT (REF. TO THE TR-2000 INSTRUCTION MANUAL.) 6. DIGITAL INPUT FIELD CONTACT VOLTAGE IS 125VDC. 7. SYSTEM POWER IS 125VDC. THE COURTESY OUTLET, LIGHT AND PRINTER REQUIRE 220VAC. THERE IS ALSO 120VAC OUTLET AVAILABLE. 8. TR-2000 VISUAL STATUS INDICATORS ARE ON THE FRONT OF THE TR-2000. STATUS OUTPUTS ARE WIRED TO X101. 9. ALL LABELING TAGS SHOWN ARE ENGRAVED LAMACOID, BLACK LETTERING ON WHITE BACKGROUND. REFERENCE PAGE 9 FOR TAG DETAILS. 10. ALL DIMENSIONS ARE IN INCHES [MM]. 11. CIRCLED NUMBERS WITH ARROWS INDICATE THE BILL OF MATERIAL REFERENCED ON PG 10.															
AMETEK S.O.# : 11002273-2															
AMETEK DRAWING# : D-1105-211															
SAITE P.O. # : API-D-0826-06656															
REFERENCE DRAWINGS															
DRAWING TITLE												DRAWING NO.			
DRAWING CONTROL SHEET NUMBER												ED-305614			
ISSUED FOR CONSTRUCTION															
AS-BUILT BY _____ DATE _____															
00 27/01/15 MA ISSUED FOR CONSTRUCTION MP															
REV. NO. DATE BY DESCRIPTION CHK'D. CERT. APP'D.															
الشركة السعودية للكهرباء Saudi Electricity Company															
DRAWN BY: MA CHECKED BY: _____ SCALE: NONE															
DATE STARTED: 28-11-12 DATE COMPLETED: _____															
DPR'G. DEPT.: _____ ENG. DEPT.: _____															
THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED												CERTIFIED BY: _____ DATE: _____			
TR-2200 FAULT RECORDER															
SYSTEM FRONT VIEW															
MODIFICATION AT IBN ZAHR S/S															
JUBAIL SAUDI ARABIA															
JOB ORDER NO. 3-1213004		INDEX P		PLANT NO. X43		DRAWING NUMBER ED-305945		SHEET NO. 04 of 24		REV. NO. 00					
SEC-ERB CAD-A (2002/04) 1105-211-4.DWG DMS VECTOR Code03															

TOP VIEW

584 x 584
Cutout (centered)
w/ 635 x 635
Removeable
Gland Plate

REF. DETAIL F
(SHEET 13)

DFR1

FR1

GPS-1

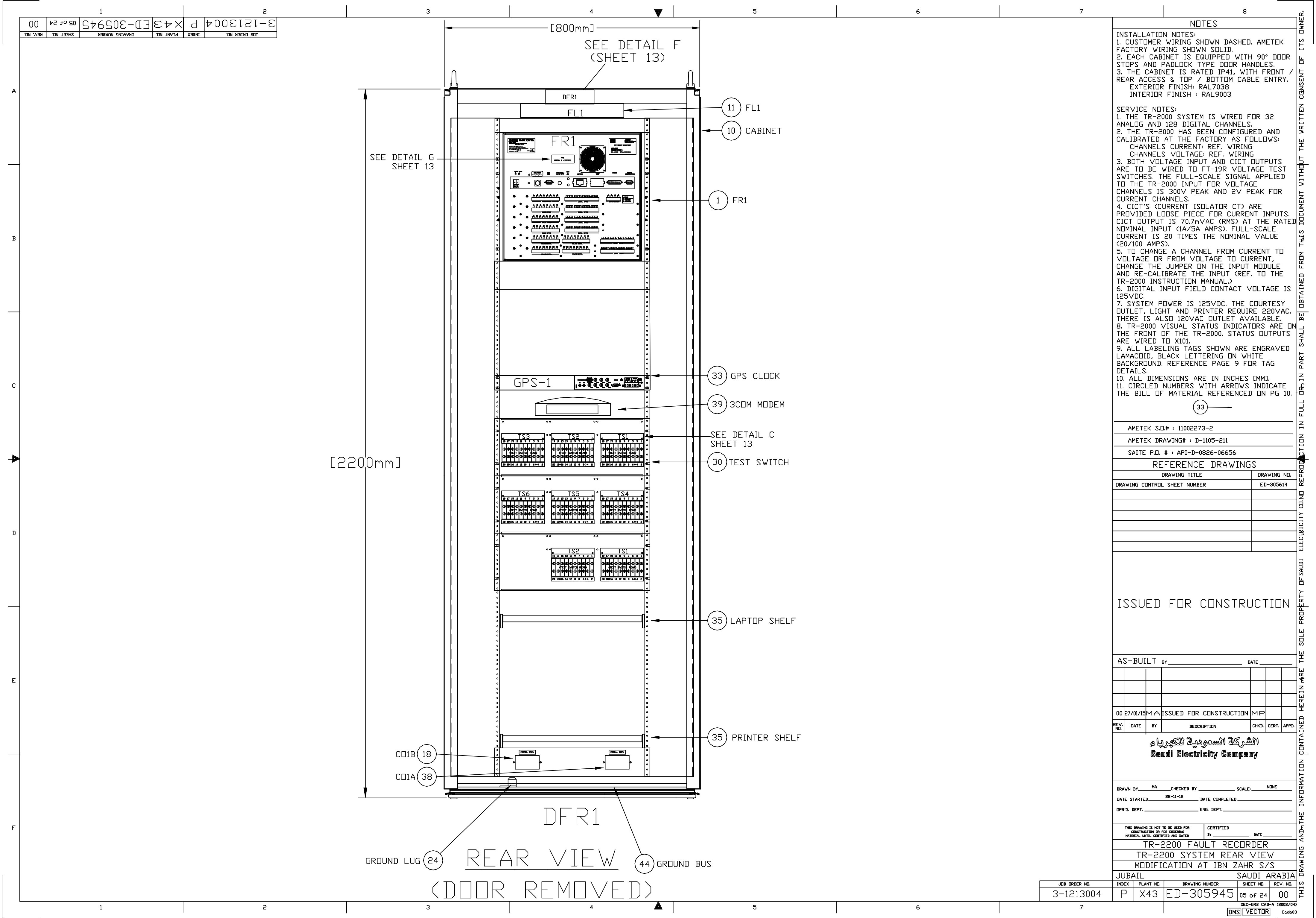
TS1 TS2 TS3

TS4 TS5 TS6

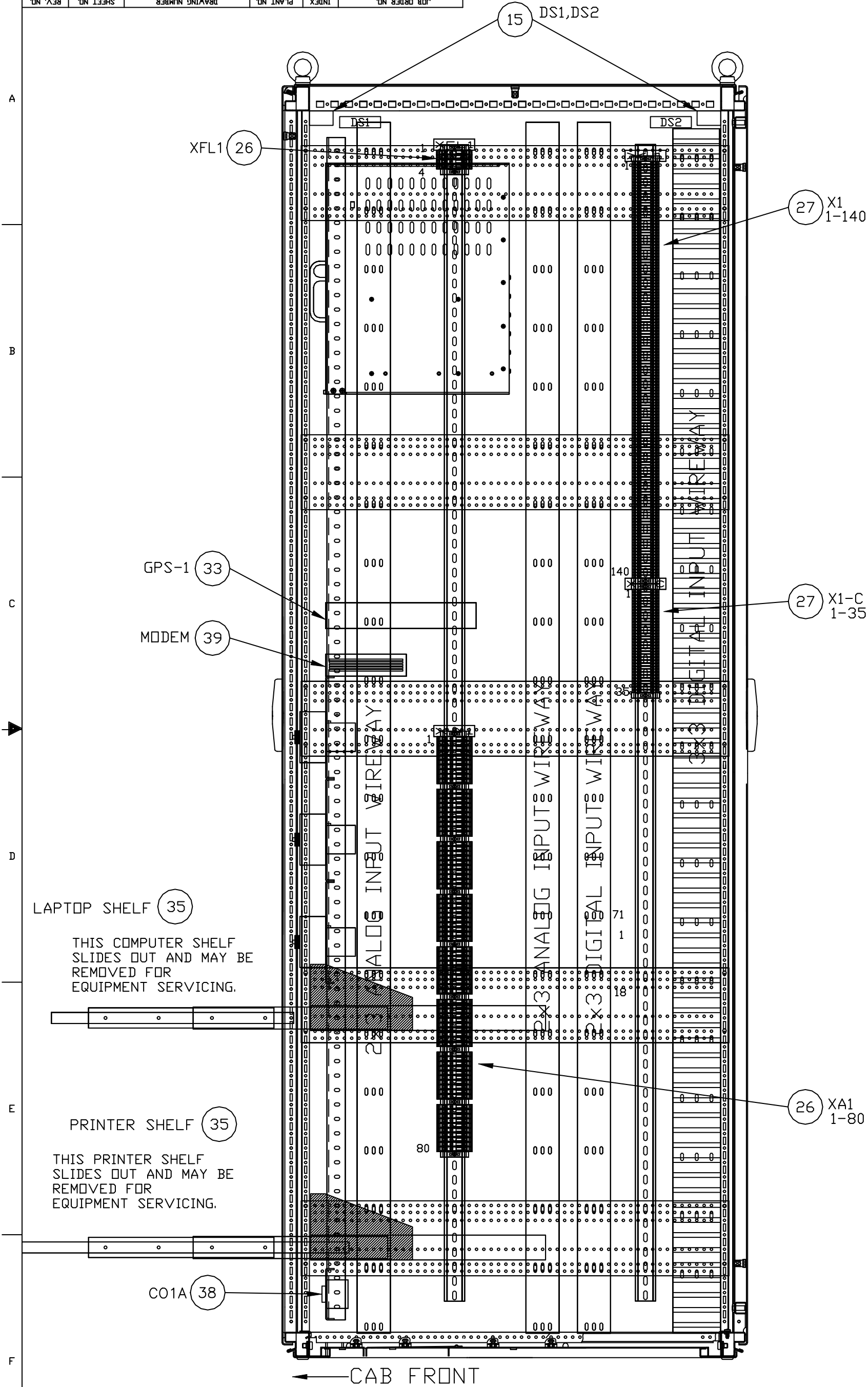
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DFR1

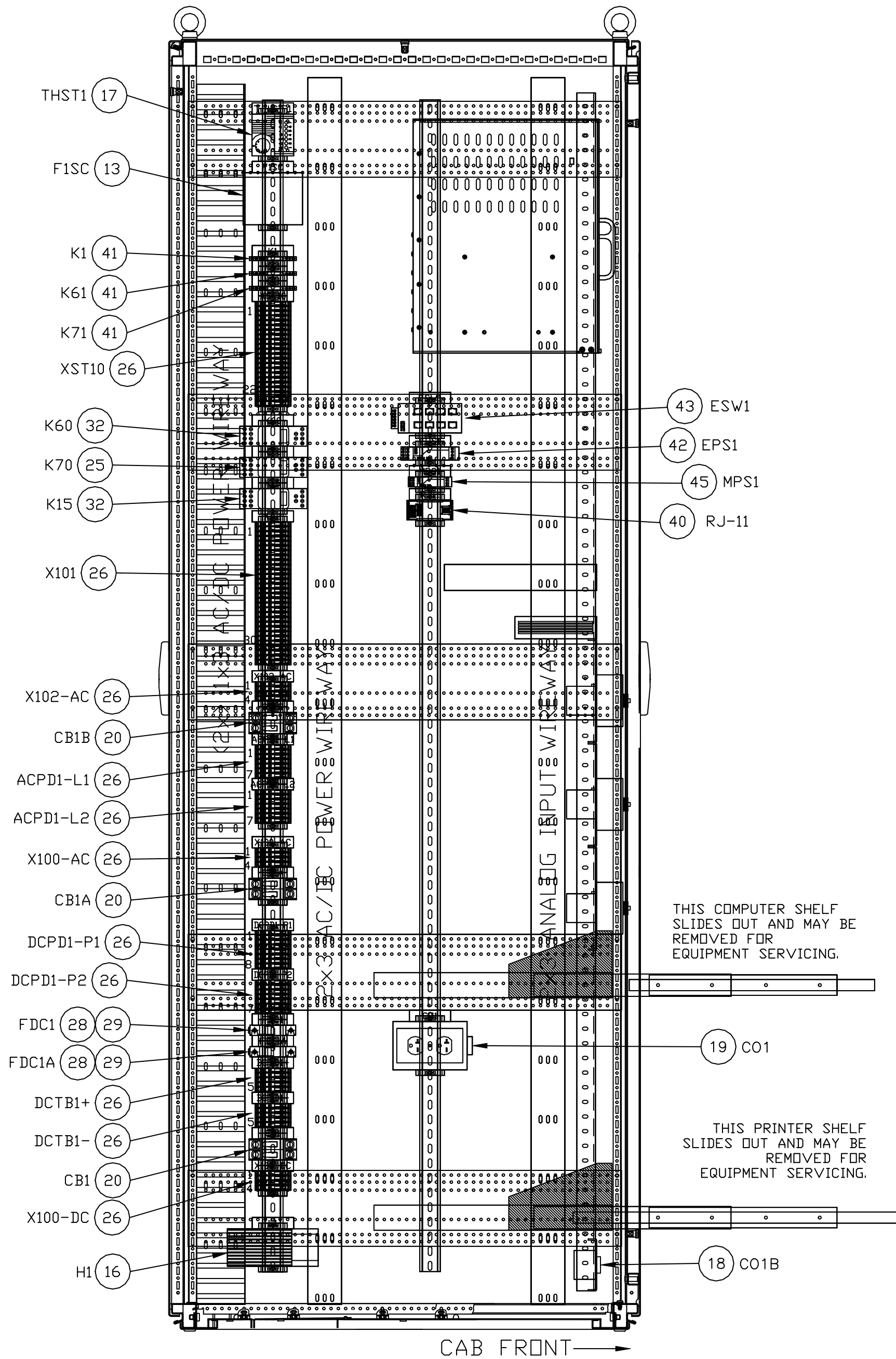
FRONT VIEW
(VIEWING DOOR INSTALLED)



1	2	3	4	5	6	7	8
00	3-1213004	P	X43	ED-305945	06 of 24	00	
JOB ORDER NO.	INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.		



DFR1 SIDE A-A



DFR1 SIDE B-B

NOTES

INSTALLATION NOTES:
1. CUSTOMER WIRING SHOWN DASHED. AMETEK FACTORY WIRING SHOWN SOLID.
2. EACH CABINET IS EQUIPPED WITH 90° DOOR STOPS AND PADLOCK TYPE DOOR HANDLES.
3. THE CABINET IS RATED IP41, WITH FRONT / REAR ACCESS & TOP / BOTTOM CABLE ENTRY.
EXTERIOR FINISH: RAL7038
INTERIOR FINISH: RAL9003

SERVICE NOTES:
1. THE TR-2000 SYSTEM IS WIRED FOR 32 ANALOG AND 128 DIGITAL CHANNELS.
2. THE TR-2000 HAS BEEN CONFIGURED AND CALIBRATED AT THE FACTORY AS FOLLOWS:
CHANNELS VOLTAGE: REF. WIRING
CHANNELS CURRENT: REF. WIRING
3. BOTH VOLTAGE INPUT AND CICT OUTPUTS ARE TO BE WIRED TO FT-19R VOLTAGE TEST SWITCHES. THE FULL-SCALE SIGNAL APPLIED TO THE TR-2000 INPUT FOR VOLTAGE CHANNELS IS 300V PEAK AND 2V PEAK FOR CURRENT CHANNELS.
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6. DIGITAL INPUT FIELD CONTACT VOLTAGE IS 125VDC.
7. SYSTEM POWER IS 125VDC. THE COURTESY OUTLET, LIGHT AND PRINTER REQUIRE 220VAC. THERE IS ALSO 120VAC OUTLET AVAILABLE.
8. TR-2000 VISUAL STATUS INDICATORS ARE ON THE FRONT OF THE TR-2000. STATUS OUTPUTS ARE WIRED TO X101.
9. ALL LABELING TAGS SHOWN ARE ENGRAVED LAMACOID, BLACK LETTERING ON WHITE BACKGROUND. REFERENCE PAGE 9 FOR TAG DETAILS.
10. ALL DIMENSIONS ARE IN INCHES [MM].
11. CIRCLED NUMBERS WITH ARROWS INDICATE THE BILL OF MATERIAL REFERENCED ON PG 10.

AMETEK S.O.# : 11002273-2

AMETEK DRAWING# : D-1105-211

SAITE P.O. # : API-D-0826-06656

REFERENCE DRAWINGS

DRAWING TITLE	DRAWING NO.
DRAWING CONTROL SHEET NUMBER	ED-305614

ISSUED FOR CONSTRUCTION

AS-BUILT BY _____ DATE _____

00	27/01/15	MA	ISSUED FOR CONSTRUCTION	MP		
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REV. NO.	DATE	BY	DESCRIPTION	CHKD.	CERT.	APPD.
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الشركة السعودية للكهرباء
Saudi Electricity Company

DRAWN BY: MA CHECKED BY: _____ SCALE: NONE
DATE STARTED: 28-11-12 DATE COMPLETED: _____
DPR/G. DEPT.: _____ ENG. DEPT.: _____

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED

CERTIFIED BY: _____ DATE: _____

TR-2200 FAULT RECORDER

DFR1 SIDE VIEW A-A, B-B

MODIFICATION AT IBN ZAHR S/S

JUBAIL SAUDI ARABIA

JOB ORDER NO.	INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.
3-1213004	P	X43	ED-305945	06 of 24	00

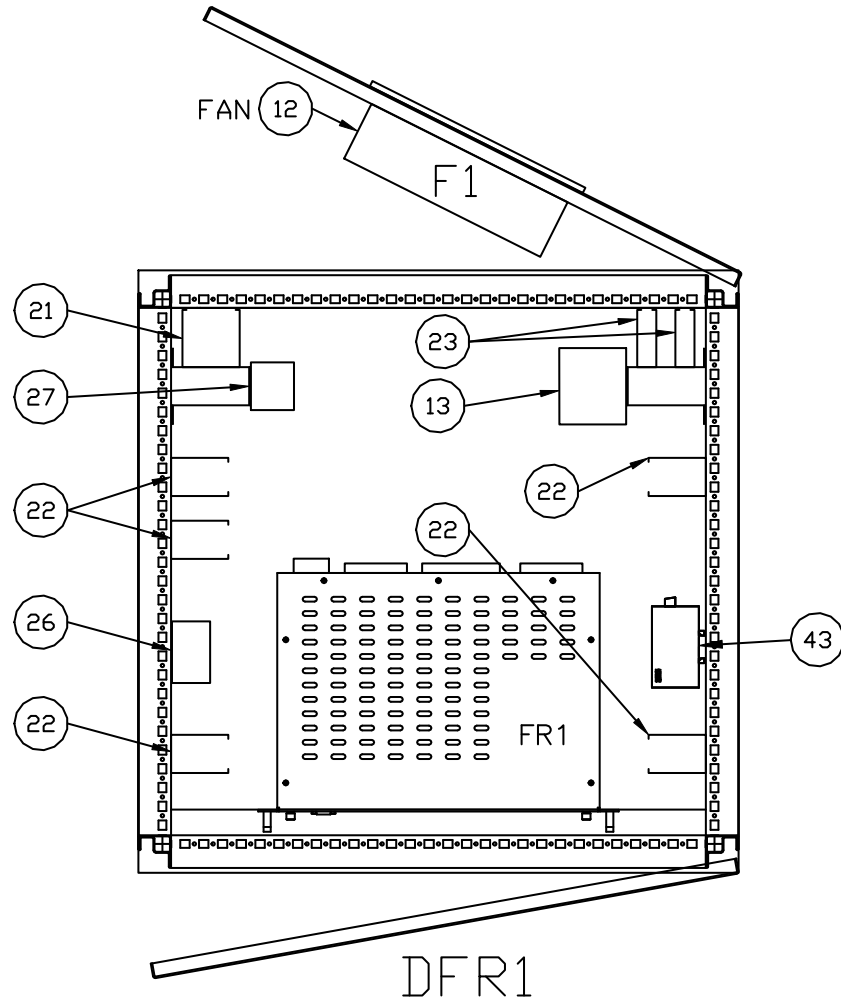
SEC-ERB CAD-A (2002/04)

DMS VECTOR Code03

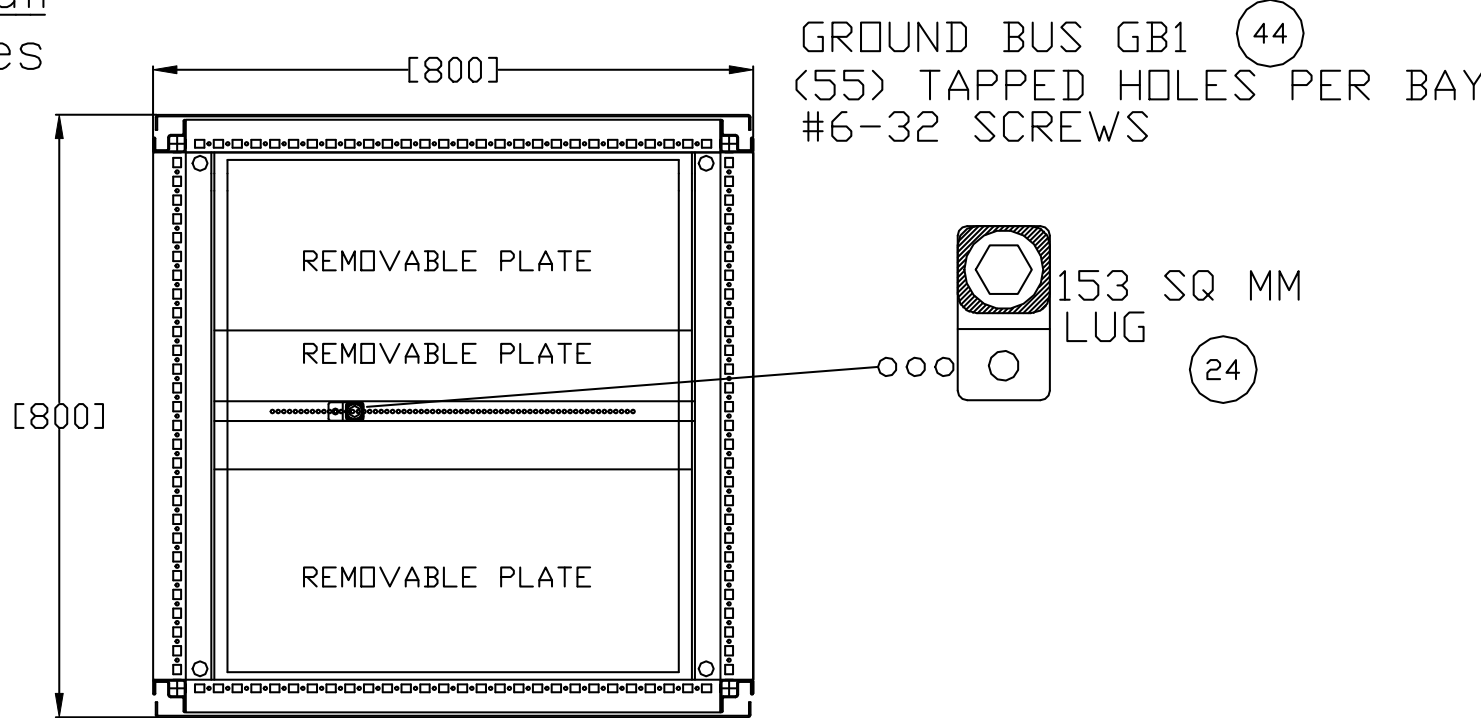
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1		2		3		4		5		6		7		8	
00		3-1213004		P		X43		ED-305945		07 of 24		00			
JOB ORDER NO.		INDEX		PLANT NO.		DRAWING NUMBER		SHEET NO.		REV. NO.					

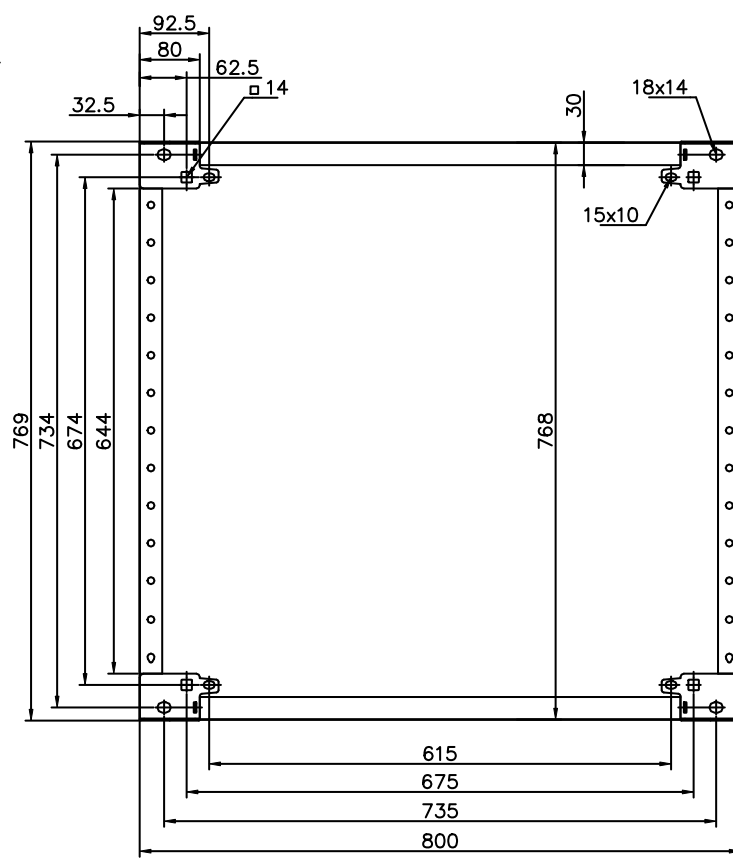
TOP VIEW
(TOP COVER REMOVED)



Cabinet Bottom Detail
-removable gland plates



Cabinet Channel Base / Mounting Detail



NOTES

INSTALLATION NOTES:

1. CUSTOMER WIRING SHOWN DASHED. AMETEK FACTORY WIRING SHOWN SOLID.
2. EACH CABINET IS EQUIPPED WITH 90° DOOR STOPS AND PADLOCK TYPE DOOR HANDLES.
3. THE CABINET IS RATED IP41, WITH FRONT / REAR ACCESS & TOP / BOTTOM CABLE ENTRY.

EXTERIOR FINISH: RAL7038
INTERIOR FINISH : RAL9003

SERVICE NOTES:

1. THE TR-2000 SYSTEM IS WIRED FOR 32 ANALOG AND 128 DIGITAL CHANNELS.
2. THE TR-2000 HAS BEEN CONFIGURED AND CALIBRATED AT THE FACTORY AS FOLLOWS:
CHANNELS CURRENT: REF. WIRING
CHANNELS VOLTAGE: REF. WIRING
3. BOTH VOLTAGE INPUT AND CICT OUTPUTS ARE TO BE WIRED TO FT-19R VOLTAGE TEST SWITCHES. THE FULL-SCALE SIGNAL APPLIED TO THE TR-2000 INPUT FOR VOLTAGE CHANNELS IS 300V PEAK AND 2V PEAK FOR CURRENT CHANNELS.
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7. SYSTEM POWER IS 125VDC. THE COURTESY OUTLET, LIGHT AND PRINTER REQUIRE 220VAC. THERE IS ALSO 120VAC OUTLET AVAILABLE.
8. TR-2000 VISUAL STATUS INDICATORS ARE ON THE FRONT OF THE TR-2000. STATUS OUTPUTS ARE WIRED TO X101.
9. ALL LABELING TAGS SHOWN ARE ENGRAVED LAMACOID, BLACK LETTERING ON WHITE BACKGROUND. REFERENCE PAGE 9 FOR TAG DETAILS.
10. ALL DIMENSIONS ARE IN INCHES [MM].
11. CIRCLED NUMBERS WITH ARROWS INDICATE THE BILL OF MATERIAL REFERENCED ON PG 10.

AMETEK S.O.# : 11002273-2	
AMETEK DRAWING# : D-1105-211	
SAITE P.O. # : API-D-0826-06656	
REFERENCE DRAWINGS	
DRAWING TITLE	DRAWING NO.
DRAWING CONTROL SHEET NUMBER	ED-305614

ISSUED FOR CONSTRUCTION

AS-BUILT BY _____ DATE _____

00	27/01/15	MA	ISSUED FOR CONSTRUCTION	MP			
REV. NO.	DATE	BY	DESCRIPTION	CHKD.	CERT.	APP'D.	

الشركة السعودية للكهرباء
Saudi Electricity Company

DRAWN BY: MA CHECKED BY: _____ SCALE: NONE

DATE STARTED: 28-11-12 DATE COMPLETED: _____

DPR'G. DEPT.: _____ ENG. DEPT.: _____

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED

CERTIFIED BY: _____ DATE: _____

TR-2200 FAULT RECORDER

TR2000 SYSTEM TOP / BOTTOM VIEW

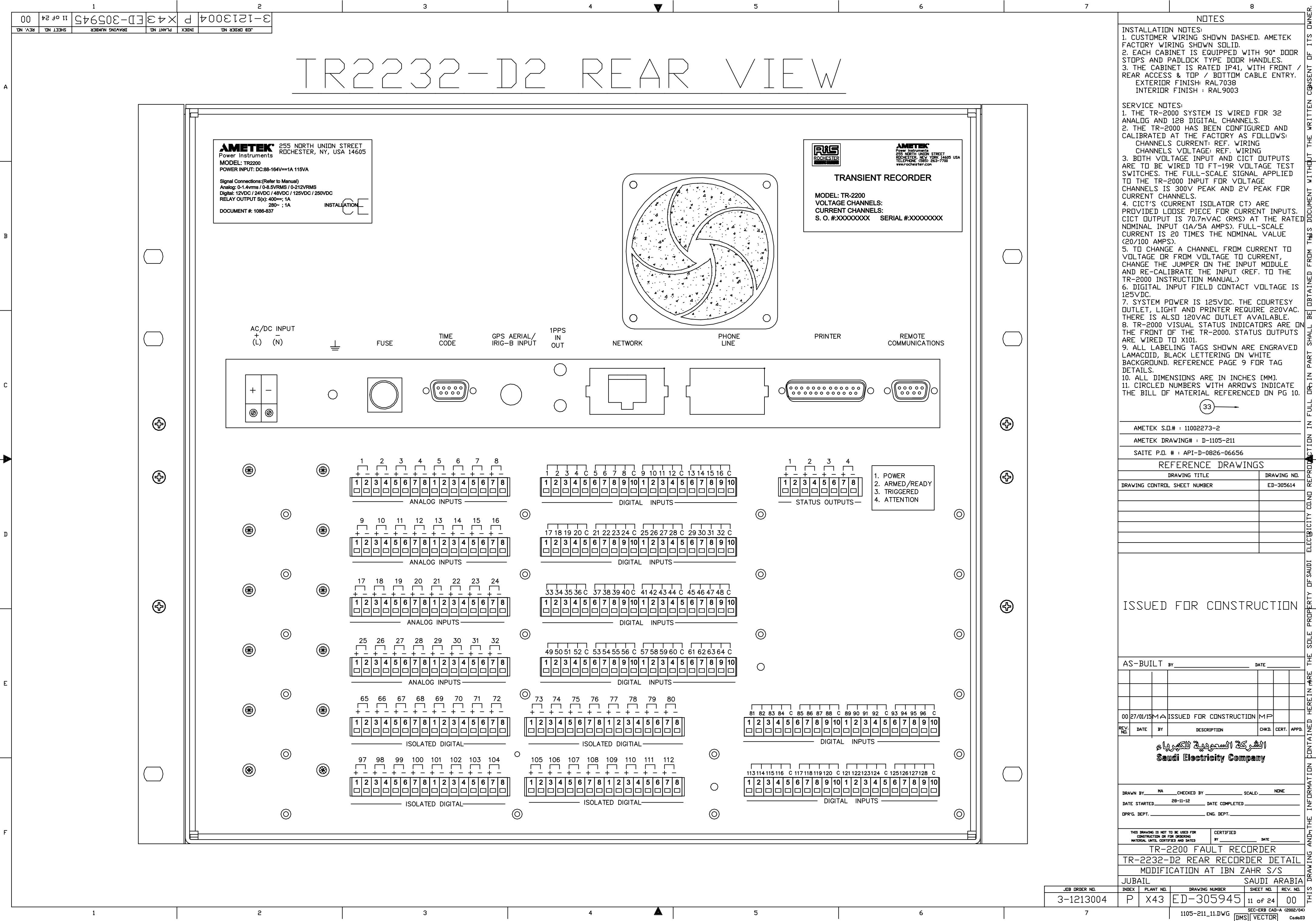
MODIFICATION AT IBN ZAHR S/S

JUBAIL SAUDI ARABIA

JOB ORDER NO.	INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.
3-1213004	P	X43	ED-305945	07 of 24	00

SEC-ERB CAD-A (2002/04)
DMS VECTOR Code03

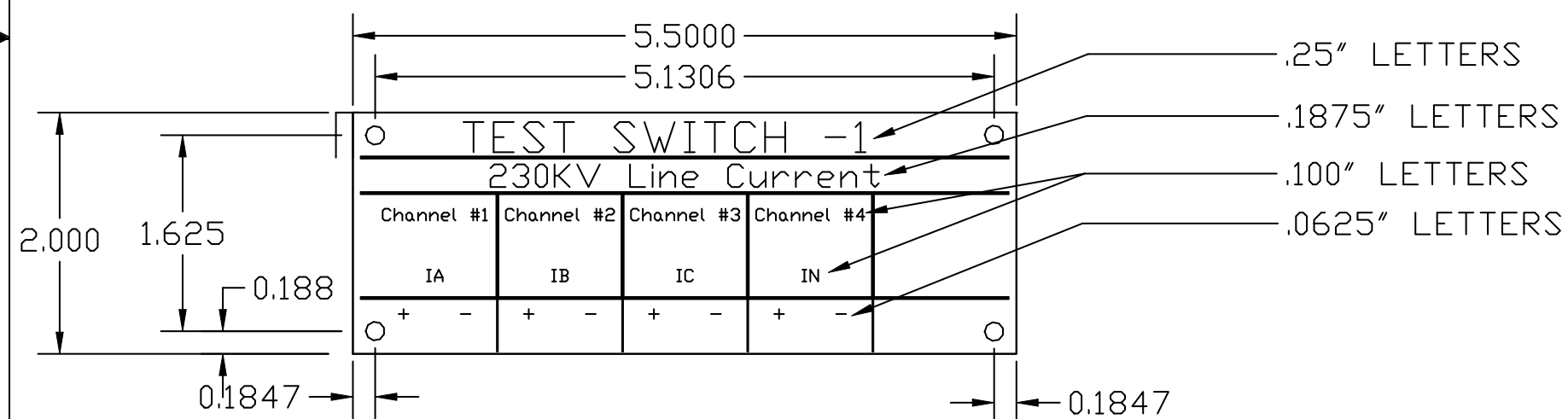
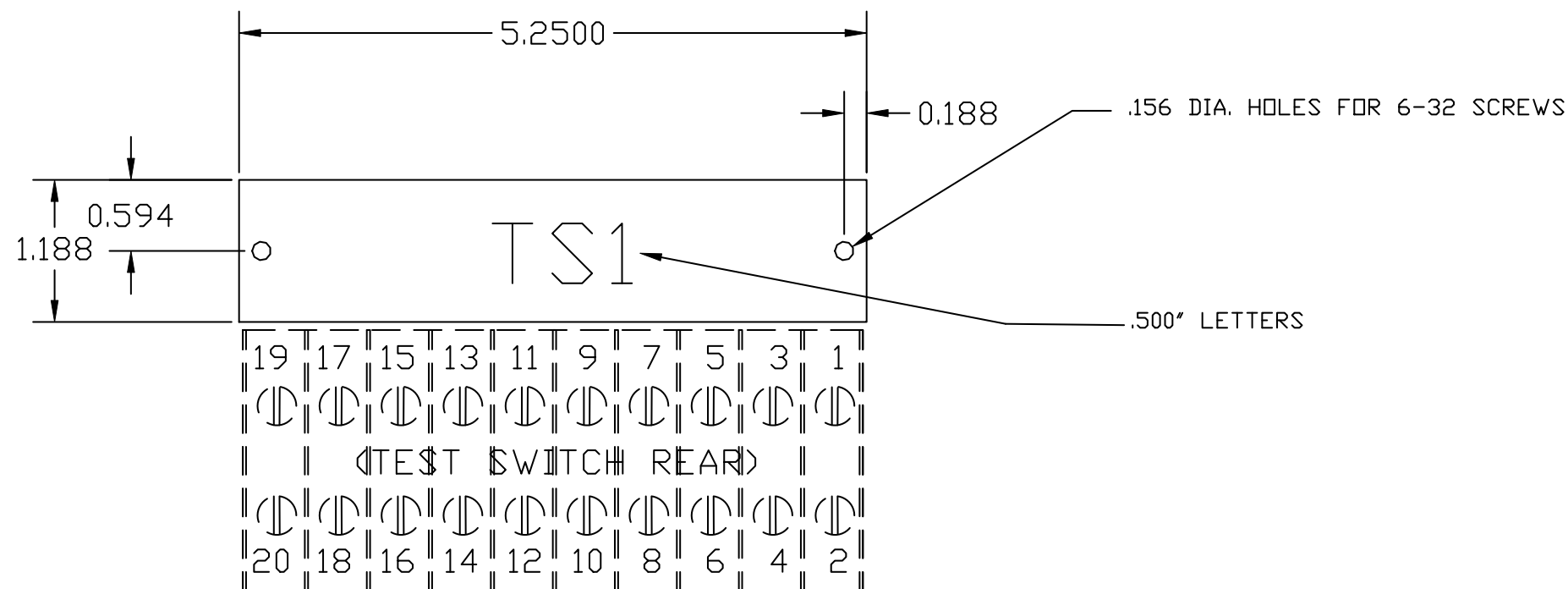
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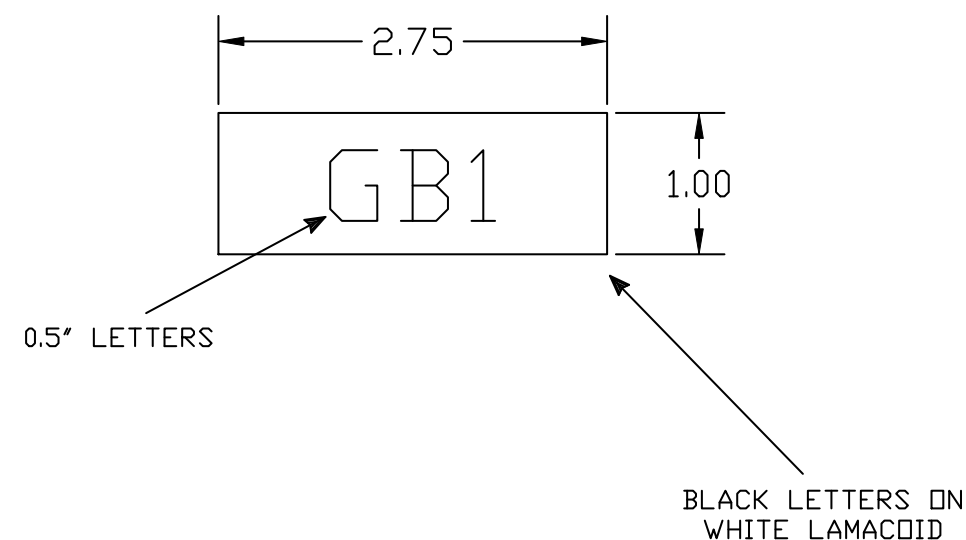
JOB ORDER NO.		INDEX		PLANT NO.		DRAWING NUMBER		SHEET NO.		REV. NO.	
3-1213004		P		X43		ED-305945		13 of 24		00	

TAG DETAILS

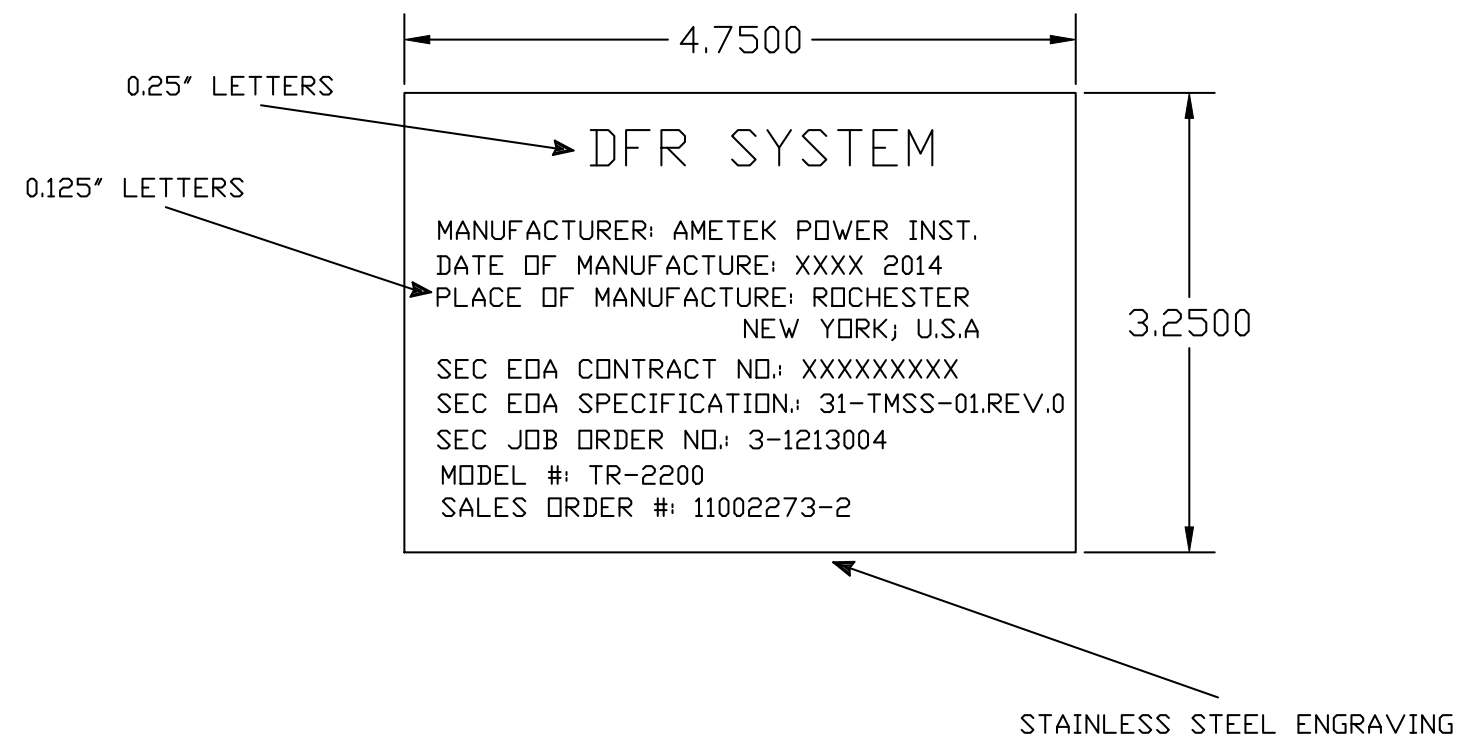
DETAIL C



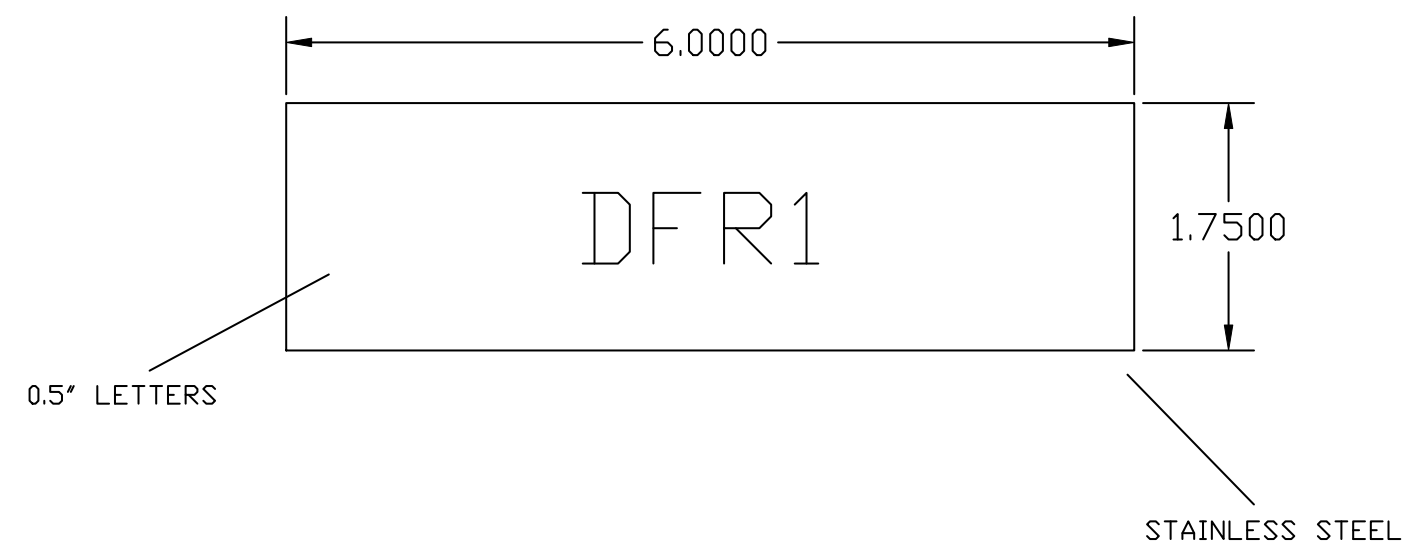
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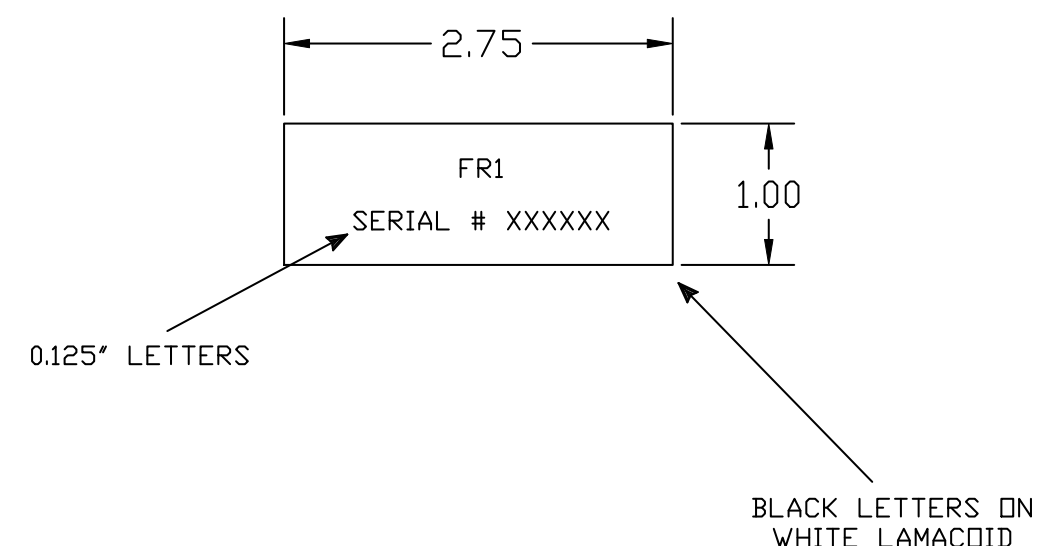
DETAIL E



DETAIL F



DETAIL G



NOTES

INSTALLATION NOTES:
1. CUSTOMER WIRING SHOWN DASHED. AMETEK
FACTORY WIRING SHOWN SOLID.
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STOPS AND PADLOCK TYPE DOOR HANDLES.
3. THE CABINET IS RATED IP41, WITH FRONT /
REAR ACCESS & TOP / BOTTOM CABLE ENTRY.
EXTERIOR FINISH: RAL7038
INTERIOR FINISH : RAL9003

SERVICE NOTES:

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2. THE TR-2000 HAS BEEN CONFIGURED AND CALIBRATED AT THE FACTORY AS FOLLOWS:
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CHANNELS VOLTAGE; REF. WIRING
3. BOTH VOLTAGE INPUT AND CICT OUTPUTS ARE TO BE WIRED TO FT-19R VOLTAGE TEST SWITCHES. THE FULL-SCALE SIGNAL APPLIED TO THE TR-2000 INPUT FOR VOLTAGE CHANNELS IS 300V PEAK AND 2V PEAK FOR CURRENT CHANNELS.
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10. ALL DIMENSIONS ARE IN INCHES [MM].
11. CIRCLED NUMBERS WITH ARROWS INDICATE THE BILL OF MATERIAL REFERENCED ON PG 10.

33

AMETEK S.O.# : 11002273-2

AMETEK DRAWING# : D-1105-211

SAITE P.D. # : API-D-0826-06656

REFERENCE DRAWINGS

DRAWING TITLE		DRAWING NO.
DRAWING CONTROL SHEET NUMBER		ED-305614

ISSUED FOR CONSTRUCTION

AS-BUILT BY _____ DATE _____

00	27/01/15	MA	ISSUED FOR CONSTRUCTION	MP					
REV. NO.	DATE	BY	DESCRIPTION	CHKD.	CERT.	APPD.			

الشركة السعودية للكهرباء
Saudi Electricity Company

DRAWN BY MA CHECKED BY _____ SCALE: NONE
DATE STARTED 28-11-12 DATE COMPLETED _____
OPR'G. DEPT. _____ ENG. DEPT. _____

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED	CERTIFIED BY _____ DATE _____
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INTERNAL DATE CERTIFIED AND DATED _____	
TR-2200 FAULT RECORDER	

SYSTEM TAG DETAILS

MODIFICATION AT IBN ZAHR S/S	
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JUBAIL			SAUDI ARABIA	
INDEX	PLANT NO	DRAWING NUMBER	SHEET NO	REV NO

JOB ORDER NO.	INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.
3-1213004	P	X43	ED-305945	13 of 24	00

1105-211_13.DWG [DWG]

SEC-ERB CAD-A (2002/04)

DMS VECTOR cdadab

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JOB ORDER NO.		INDEX		PLANT NO.		DRAWING NUMBER		SHEET NO.		REV. NO.	
3-1213004		P		X43		ED-305945		15 of 24		00	

SYSTEM

PERIPHERAL CONNECTIONS

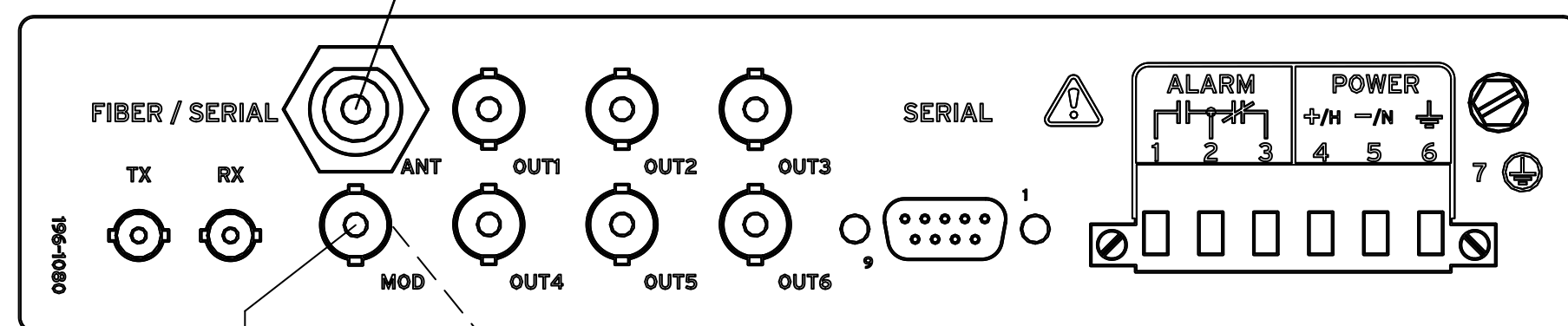
SEL 2407 GPS RECEIVER VIEW

LOCATED IN DFR1

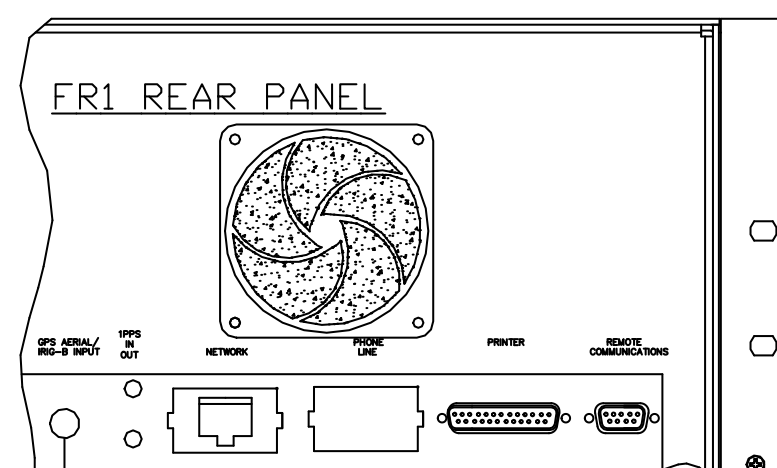
NOTE: ANTENNA SHALL BE INSTALLED
OUTSIDE OF THE CONTROL ROOM

GPS
ANTENNA

150 ft RG-6 type cable
(max. 150ft)



BNC type connector



FR1 REAR PANEL

	NOTES
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AMETEK S.O.# : 11002273-2

AMETEK DRAWING# : D-1105-211

SAITE P.O. # : API-D-0826-06656

REFERENCE DRAWINGS

[illegible]

ISSUED FOR CONSTRUCTION

AS-BUILT BY	DATE
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00	27/01/15	MA	ISSUED FOR CONSTRUCTION	MP			
REV.	DATE	BY	DESCRIPTION	CHKD.	CERT.	APPD.	

الشركة السعودية للكهرباء
Saudi Electricity Company

DRAWN BY MA CHECKED BY _____ SCALE: NONE

DATE STARTED 28-11-12 DATE COMPLETED _____

DPR'G. DEPT. _____ ENG. DEPT. _____


THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED	CERTIFIED BY _____ DATE _____
--	----------------------------------

INTERNAL STYLE SERIALS AND DATES			
TR-2200 FAULT RECORDER			

GPS / IRIG-B INPUT, FR1

MODIFICATION AT IBN ZAHR S/S

JUBAIL	SAUDI ARABIA
--------	--------------

JOB ORDER NO.		INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.
3-1213004		P	X43	ED-305945	15 of 24	00
7				1105-211_15.DWG	SEC-ERB CAD-A (2002/04)	
					 Code 03	

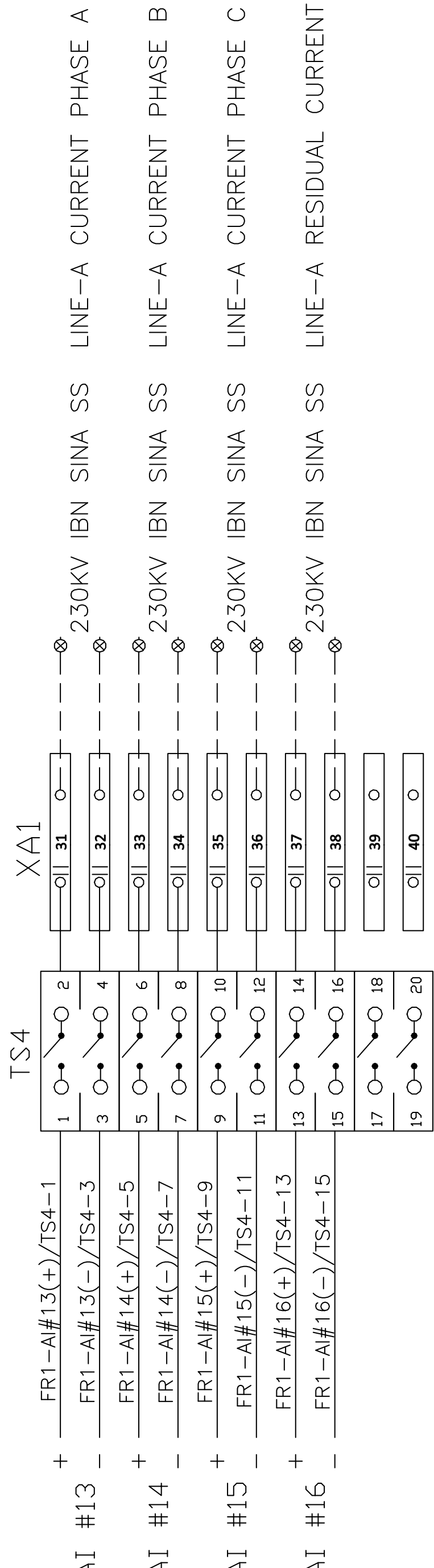
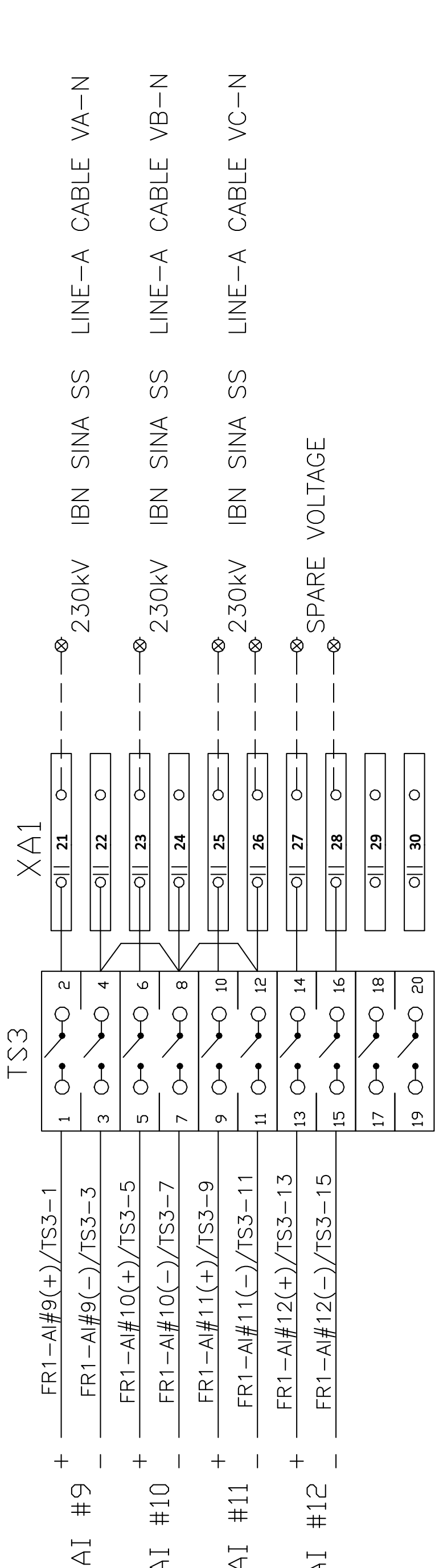
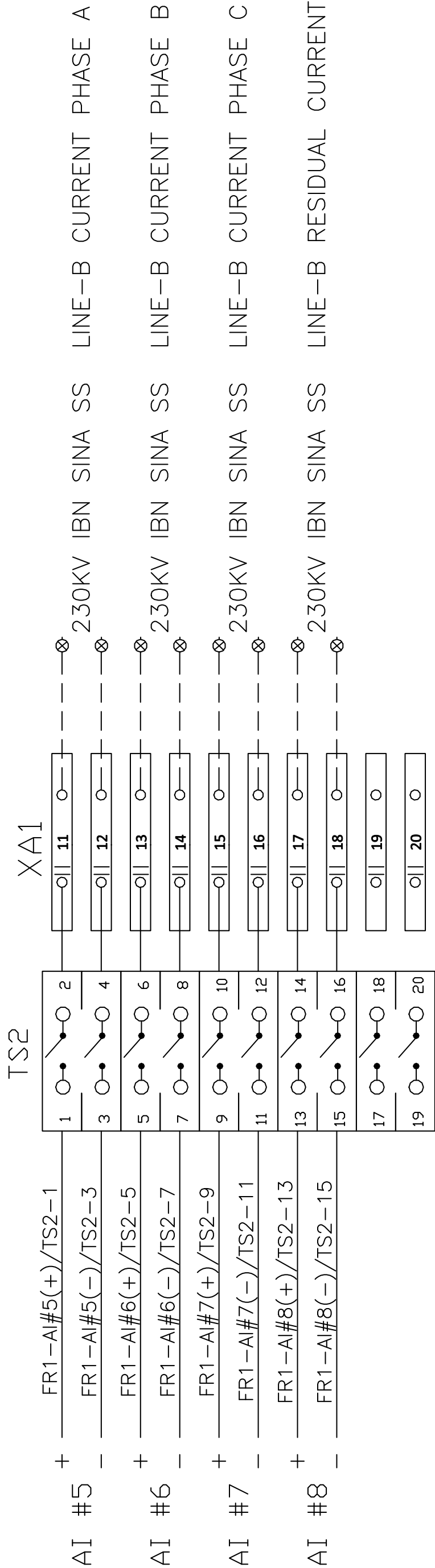
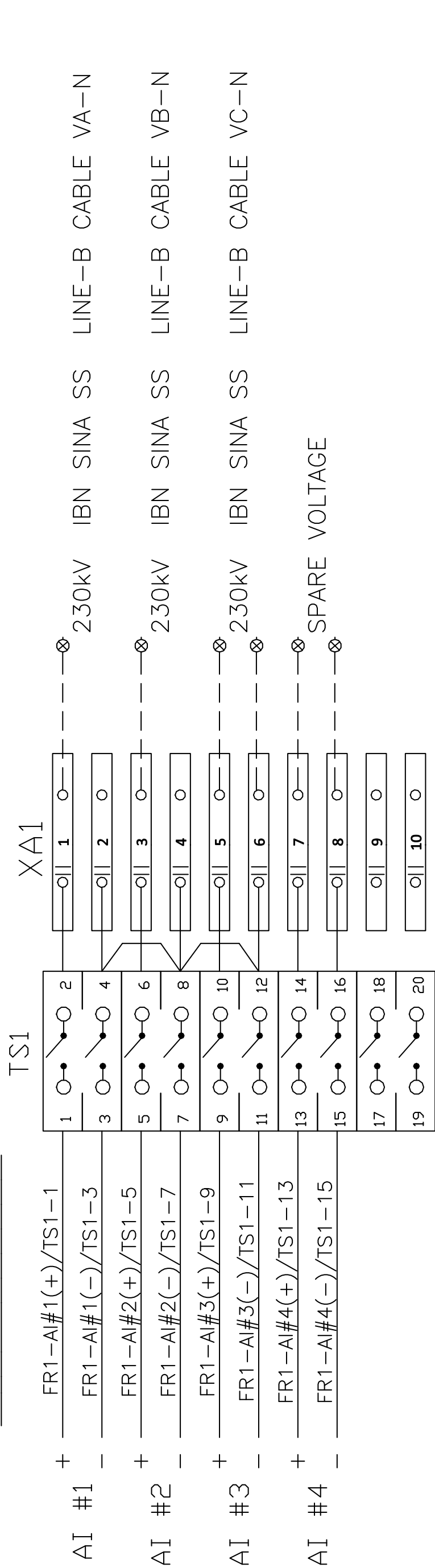
SEC-ERB CAD-A (2002/04)
DMS VECTOR Coda03

ANALOG INPUTS

WIRE MARKER

FIELD CONNECTIONS

JOB ORDER NO.	INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.
3-1213004	P	X43	ED-305945	16 of 24	00



NOTE : ABB FT-1 TYPE TEST SWITCH

JUBAIL		SAUDI ARABIA	
JOB ORDER NO.	INDEX	PLANT NO.	DRAWING NUMBER
3-1213004	P	X43	ED-305945
SHEET NO.		REV. NO.	
16 of 24		00	
SEC-ERB CAD-A (2002/04)			
1105-211_16.DWG			
DMS VECTOR			
Code03			
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AS-BUILT BY _____ DATE _____			
00 27/01/15 MA ISSUED FOR CONSTRUCTION MP			
REV.	DATE	BY	DESCRIPTION
			CHKD. CERT. APPD.
الشركة السعودية للكهرباء Saudi Electricity Company			
DRAWN BY: MA CHECKED BY: _____ SCALE: _____ NONE			
DATE STARTED: 28-11-12 DATE COMPLETED: _____			
DPR/G. DEPT.: _____ ENG. DEPT.: _____			
THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED			
CERTIFIED BY: _____ DATE _____			
TR-2200 FAULT RECORDER			
FR1 ANALOG INPUTS 1-16 WIRING			
MODIFICATION AT IBN ZAHR S/S			
JUBAIL SAUDI ARABIA			
NOTES			
GENERAL NOTES: 1. 24 CICT'S ARE RATED 1 AMP NOMINAL CURRENT. CICT'S ARE SUPPLIED LOOSE & MOUNTED REMOTELY. 2. DIGITAL INPUT FIELD CONTACT VOLTAGE IS 125VDC AND IS DISTRIBUTED ON X1-C. 3. LABEL NOTES: AI REFERS TO ANALOG INPUT DI REFERS TO DIGITAL INPUT R REFERS TO RED Y REFERS TO YELLOW BLU REFERS TO BLUE BLK REFERS TO BLACK G REFERS TO GRAY 4. WIRE MARKERS ARE LOCATED AT BOTH ENDS OF EVERY WIRE DESIGNATING WIRE ORIGIN AND DESTINATION. WIRE MARKERS ARE HEAT SHRINK TYPE. 5. WIRE AT THE REAR OF THE RECORDER AND THE PHENIX TERMINAL BLOCKS ARE TERMINATED WITH TERMINAL PIN LUGS. 6. ALL DIGITAL WIRING IS 18AWG 600V PVC TYPE WIRE. ALL ANALOG WIRING IS 18AWG 600V PVC TYPE WIRE. ALL 15 AMP POWER DISTRIBUTION WIRING IS 14AWG 600V PVC TYPE WIRE. ALL 3AMP POWER DISTRIBUTION WIRING IS 18AWG 600V PVC TYPE WIRE. 7. WIRING THAT IS CONTINUED ON ANOTHER SHEET IS DENOED WITH THE SHEET NUMBER AND LOCATION IN A HEXAGON AS FOLLOWS: 8. PRIMARY FAN(F1) ARE CONTROLLED BY F1SC SPEED CONTROLLER SET TO ATTAIN FULL SPEED WHEN THE TEMPERATURE REACHES 40°C.			
TS1-1/TR1-AI#1+ TS1-1/TR1-AI#1+			
16 AI			

DIGITAL INPUTS

WIRE MARKER

PHOENIX MTK TB

FIELD CONNECTIONS

FR1DI-33(+)

FR1DI-34(+)

FR1DI-35(+)

FR1DI-36(+)

FR1DI-37(+)

FR1DI-38(+)

FR1DI-39(+)

FR1DI-40(+)

FR1DI-41(+)

FR1DI-42(+)

FR1DI-43(+)

FR1DI-44(+)

FR1DI-45(+)

FR1DI-46(+)

FR1DI-47(+)

FR1DI-48(+)

FR1DI-49(+)

FR1DI-50(+)

FR1DI-51(+)

FR1DI-52(+)

FR1DI-53(+)

FR1DI-54(+)

FR1DI-55(+)

FR1DI-56(+)

FR1DI-57(+)

FR1DI-58(+)

FR1DI-59(+)

FR1DI-60(+)

FR1DI-61(+)

FR1DI-62(+)

FR1DI-63(+)

FR1DI-64(+)

33

34

35

36

37

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64

SPARE

SPARE

SPARE

SPARE

SPARE

230 KV IBN SINA LINE-A_RELAY_SET-1 TRIP

230 KV IBN SINA LINE-A_RELAY_SET-1 DIST_XMIT

230 KV IBN SINA LINE-A_RELAY_SET-1 DIST_RECV

230 KV IBN SINA LINE-A_RELAY_SET-1 21/67N FORWARD_START

230 KV IBN SINA LINE-A_RELAY_SET-1 21/67N BACKWARD_START

230 KV IBN SINA LINE-A_RELAY_SET-1 DEF_XMIT

230 KV IBN SINA LINE-A_RELAY_SET-1 DEF_RECV

230 KV IBN SINA LINE-A_RELAY_SET-1 BKR_FAIL_CH_1_RECV

230 KV IBN SINA LINE-A_RELAY_SET-2 TRIP

230 KV IBN SINA LINE-A_RELAY_SET-2 DIST_XMIT

230 KV IBN SINA LINE-A_RELAY_SET-2 DIST_RECV

230 KV IBN SINA LINE-A_RELAY_SET-2 21/67N FORWARD_START

230 KV IBN SINA LINE-A_RELAY_SET-2 21/67N BACKWARD_START

230 KV IBN SINA LINE-A_RELAY_SET-2 DEF_XMIT

CROSS_TRIGGER

230 KV IBN SINA LINE-A_RELAY_SET-2 DEF_RECV

230 KV IBN SINA LINE-A_RELAY_SET-2 BKR_FAIL_CH_2_RECV

230 KV IBN SINA LINE-A_PD_TRIP_CH_1_RECV

230 KV IBN SINA LINE-A_PD_TRIP_CH_2_RECV

A706_BKR_OPEN

A706_AUTO_RECLOUSE-FUTURE

A706_86-1_OPT

A706_86-2_OPT

A706_94BF_OPT

A706_86BF_OPT

A706_94PD1_OPT

A706_94PD2_OPT

DWG.NO.

,SHT:

18E7

X1-C-8

X1-C

9

10

11

12

13

14

15

16

+125 VDC

+125 VDC

+125 VDC

+125 VDC

+125 VDC

+125 VDC

+125 VDC

+125 VDC

DWG.NO#

SHT.:

DWG.NO#

SHT.:

DWG.NO#

SHT.:

DWG.NO#

SHT.:

DWG.NO#

SHT.:

DWG.NO#

SHT.:

DWG.NO#

SHT.:

DWG.NO#

SHT.:

20E6

X1-C-17

X1

33

34

35

36

37

38

39

40

41

42

43

44

45

46

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48

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62

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64

SPARE

SPARE

SPARE

SPARE

SPARE

230 KV IBN SINA LINE-A_RELAY_SET-1 TRIP

230 KV IBN SINA LINE-A_RELAY_SET-1 DIST_XMIT

230 KV IBN SINA LINE-A_RELAY_SET-1 DIST_RECV

230 KV IBN SINA LINE-A_RELAY_SET-1 21/67N FORWARD_START

230 KV IBN SINA LINE-A_RELAY_SET-1 21/67N BACKWARD_START

230 KV IBN SINA LINE-A_RELAY_SET-1 DEF_XMIT

230 KV IBN SINA LINE-A_RELAY_SET-1 DEF_RECV

230 KV IBN SINA LINE-A_RELAY_SET-1 BKR_FAIL_CH_1_RECV

230 KV IBN SINA LINE-A_RELAY_SET-2 TRIP

230 KV IBN SINA LINE-A_RELAY_SET-2 DIST_XMIT

230 KV IBN SINA LINE-A_RELAY_SET-2 DIST_RECV

230 KV IBN SINA LINE-A_RELAY_SET-2 21/67N FORWARD_START

230 KV IBN SINA LINE-A_RELAY_SET-2 21/67N BACKWARD_START

230 KV IBN SINA LINE-A_RELAY_SET-2 DEF_XMIT

CROSS_TRIGGER

230 KV IBN SINA LINE-A_RELAY_SET-2 DEF_RECV

230 KV IBN SINA LINE-A_RELAY_SET-2 BKR_FAIL_CH_2_RECV

230 KV IBN SINA LINE-A_PD_TRIP_CH_1_RECV

230 KV IBN SINA LINE-A_PD_TRIP_CH_2_RECV

A706_BKR_OPEN

A706_AUTO_RECLOUSE-FUTURE

A706_86-1_OPT

A706_86-2_OPT

A706_94BF_OPT

A706_86BF_OPT

A706_94PD1_OPT

A706_94PD2_OPT

DWG.NO.

,SHT:

19 of 24

00

3-1213004

P

X43

ED-305945

19 of 24

00

1105-211_19.DWG

DMS

VECTOR

Code03

NOTES

GENERAL NOTES:
1. 24 CICT'S ARE RATED 1 AMP NOMINAL CURRENT. CICT'S ARE SUPPLIED LOOSE & MOUNTED REMOTELY.
2. DIGITAL INPUT FIELD CONTACT VOLTAGE IS 125VDC AND IS DISTRIBUTED ON X1-C.
3. LABEL NOTES:
AI REFERS TO ANALOG INPUT
DI REFERS TO DIGITAL INPUT
R REFERS TO RED
Y REFERS TO YELLOW
BLU REFERS TO BLUE
BLK REFERS TO BLACK
G REFERS TO GRAY
4. WIRE MARKERS ARE LOCATED AT BOTH ENDS OF EVERY WIRE DESIGNATING WIRE ORIGIN AND DESTINATION. WIRE MARKERS ARE HEAT SHRINK TYPE.
5. WIRE AT THE REAR OF THE RECORDER AND THE PHOENIX TERMINAL BLOCKS ARE TERMINATED WITH TERMINAL PIN LUGS.
6. ALL DIGITAL WIRING IS 18AWG 600V PVC TYPE WIRE.
ALL ANALOG WIRING IS 18AWG 600V PVC TYPE WIRE.
ALL 15 AMP POWER DISTRIBUTION WIRING IS 14AWG 600V PVC TYPE WIRE.
ALL 3AMP POWER DISTRIBUTION WIRING IS 18AWG 600V PVC TYPE WIRE.
7. WIRING THAT IS CONTINUED ON ANOTHER SHEET IS DENOED WITH THE SHEET NUMBER AND LOCATION IN A HEXAGON AS FOLLOWS:
8. PRIMARY FAN(F1) ARE CONTROLLED BY F1SC SPEED CONTROLLER SET TO ATTAIN FULL SPEED WHEN THE TEMPERATURE REACHES 40°C.

AMETEK S.O.# : 11002273-2
AMETEK DRAWING# : D-1105-211
SAITE P.O. # : API-D-0826-06656

REFERENCE DRAWINGS
DRAWING TITLE
DRAWING CONTROL SHEET NUMBER
DRAWING NO.
ED-305614

ISSUED FOR CONSTRUCTION

AS-BUILT BY
DATE

0027/01/15
MA
ISSUED FOR CONSTRUCTION
MP

الشركة السعودية للكهرباء
Saudi Electricity Company

DRAWN BY: MA
CHECKED BY
SCALE: NONE
DATE STARTED: 28-11-12
DATE COMPLETED
DPR/G. DEPT.
ENG. DEPT.

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CERTIFIED BY
DATE

TR-2200 FAULT RECORDER
FR1 DIGITAL CHANNEL 33-64 WIRING DET.
MODIFICATION AT IBN ZAHR S/S

JUBAIL
SAUDI ARABIA

JOB ORDER NO.
3-1213004

INDEX
P

PLANT NO.
X43

DRAWING NUMBER
ED-305945

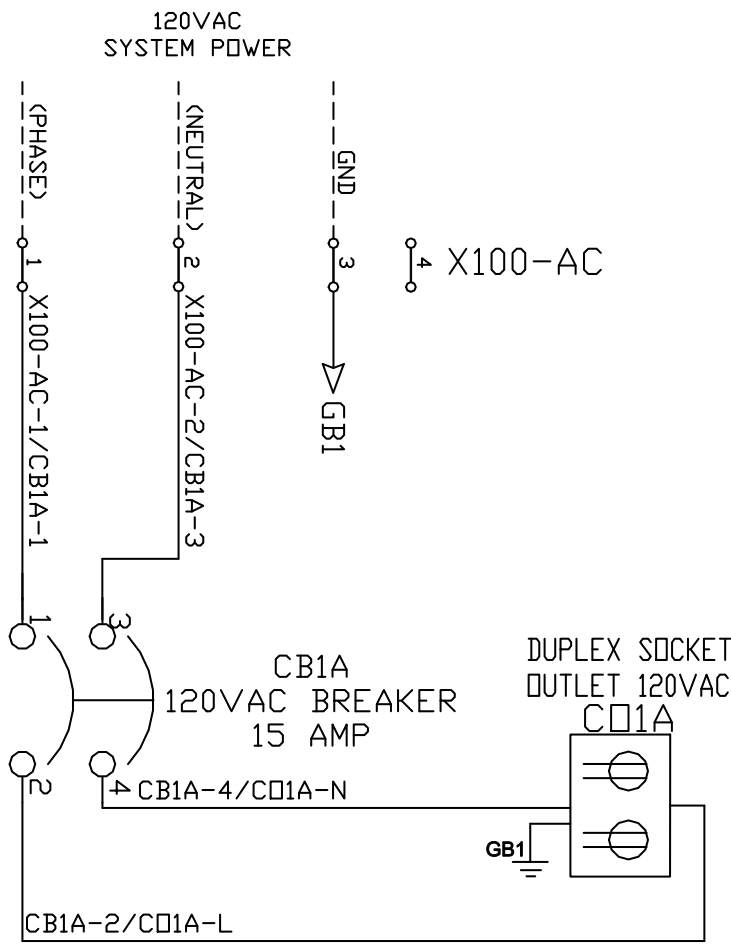
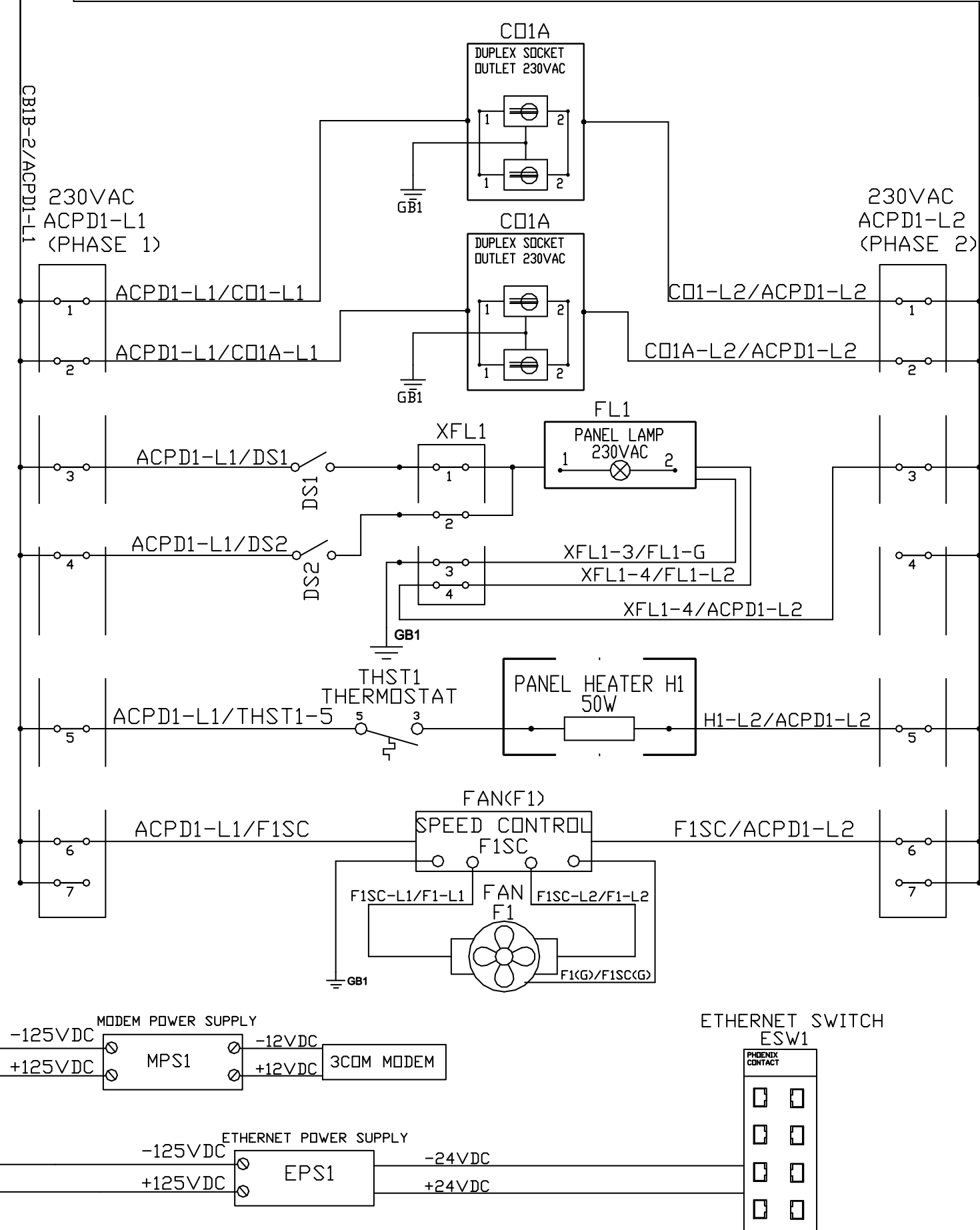
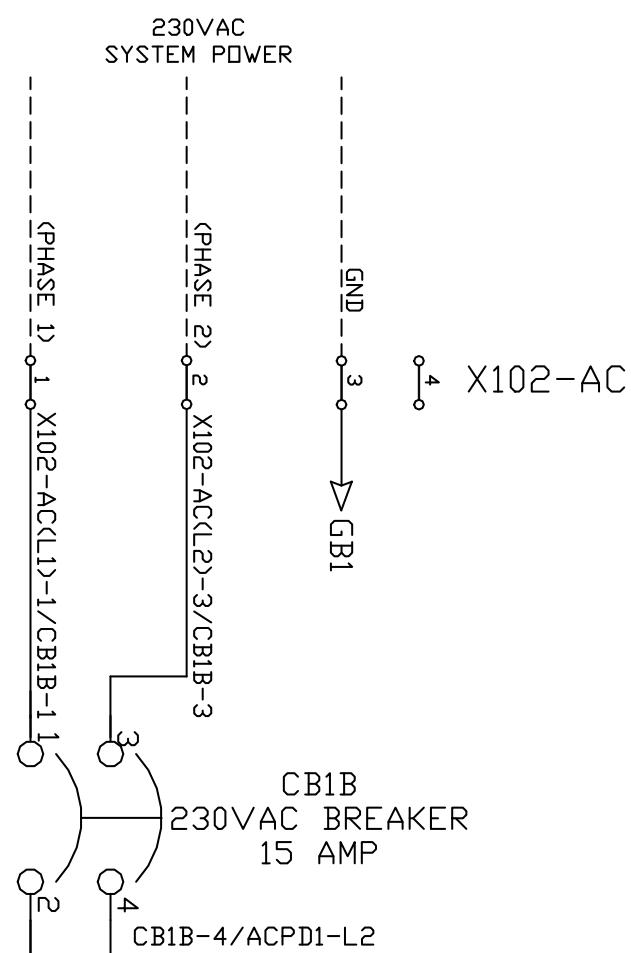
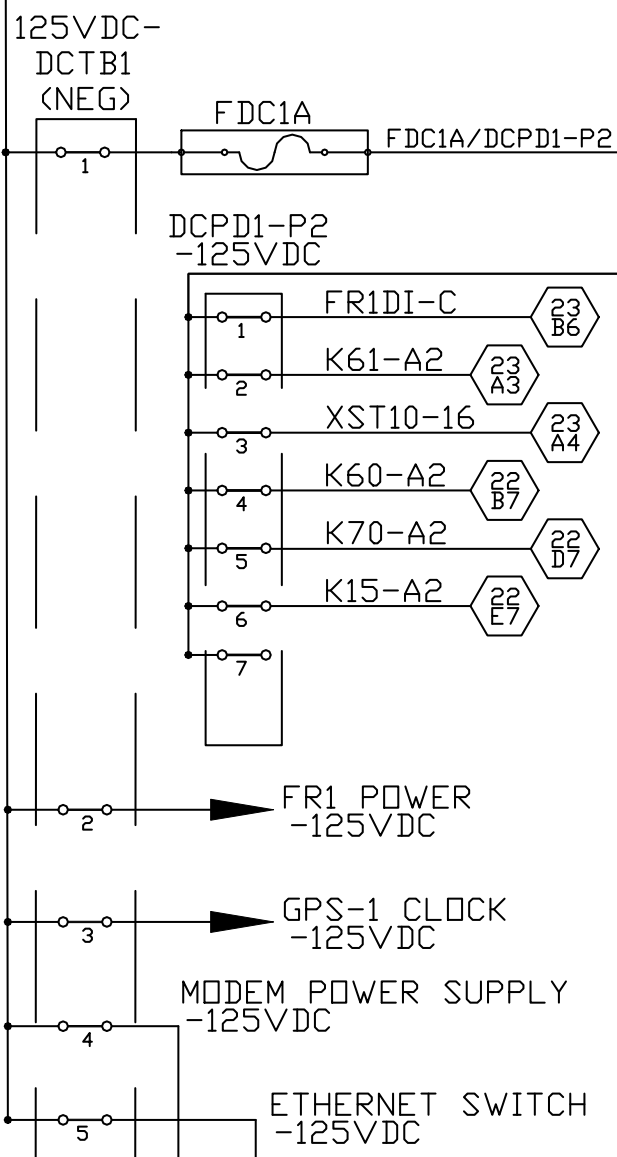
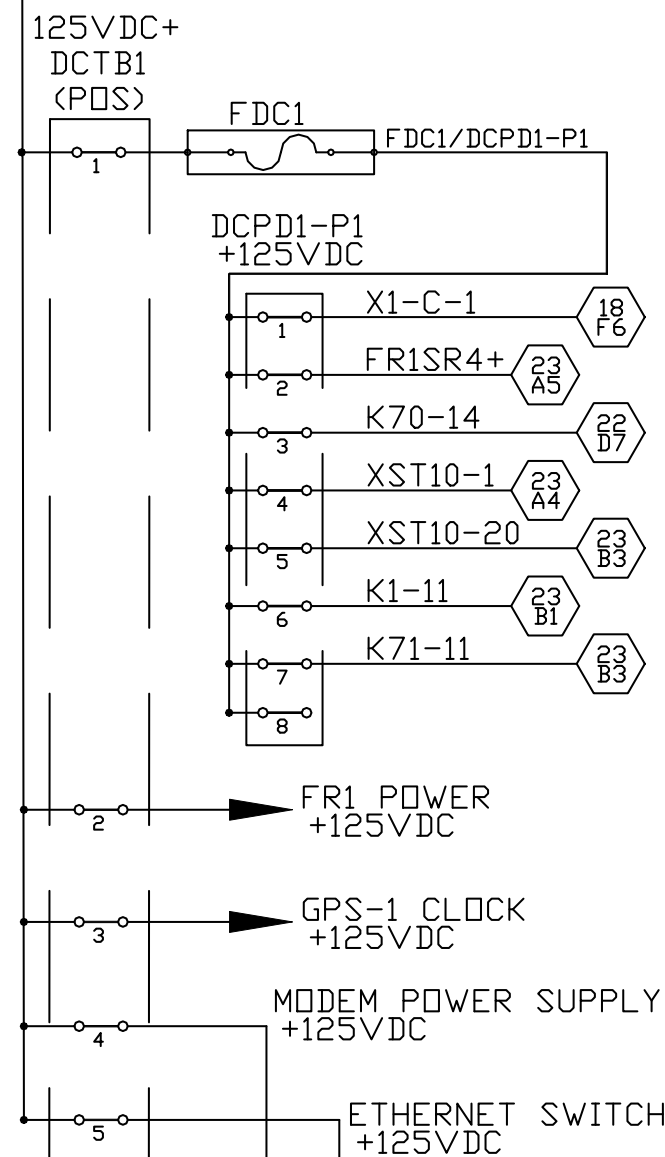
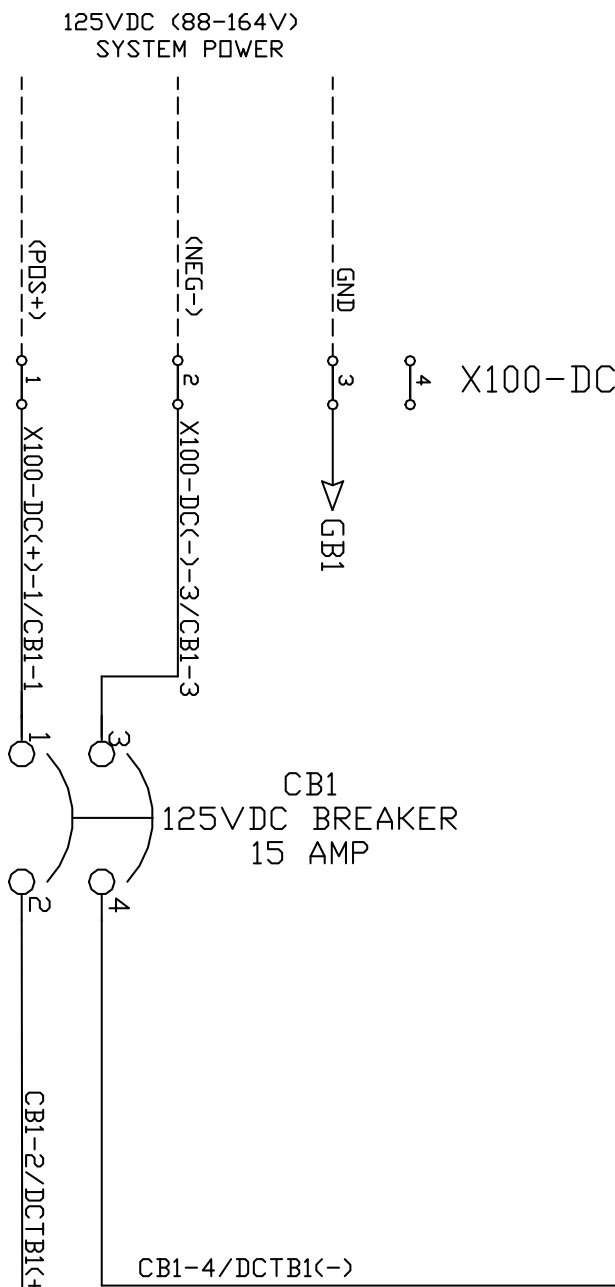
SHEET NO.
19 of 24

REV. NO.
00

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1	2	3	4	5	6	7	8
3-1213004	3-1213004	3-1213004	3-1213004	3-1213004	3-1213004	3-1213004	3-1213004
00	24 of 24	ED-305945	X43	P	INDEX	PLANT NO.	JOB ORDER NO.
REV. NO.	SHEET NO.	DRAWING NUMBER	PLANT NO.	INDEX	PLANT NO.	JOB ORDER NO.	

DFR1 POWER DISTRIBUTION



NOTES

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TS1-1/TR1-AI#1+ TS1-1/TR1-AI#1+

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7. WIRING THAT IS CONTINUED ON ANOTHER SHEET IS DENOTED WITH THE SHEET NUMBER AND LOCATION IN A HEXAGON AS FOLLOWS:

16 AI

8. PRIMARY FAN(F1) ARE CONTROLLED BY F1SC SPEED CONTROLLER SET TO ATTAIN FULL SPEED WHEN THE TEMPERATURE REACHES 40°C.

AMETEK S.O.# : 11002273-2	
AMETEK DRAWING# : D-1105-211	
SAITE P.O. # : API-D-0826-06656	
REFERENCE DRAWINGS	
DRAWING TITLE	DRAWING NO.
DRAWING CONTROL SHEET NUMBER	ED-305614

ISSUED FOR CONSTRUCTION

AS-BUILT BY DATE

00 27/01/15 MA ISSUED FOR CONSTRUCTION MP

REV. NO. DATE BY DESCRIPTION CHKD. CERT. APPD.

الشركة السعودية للكهرباء
Saudi Electricity Company

DRAWN BY: MA CHECKED BY: SCALE: NONE
DATE STARTED: 28-11-12 DATE COMPLETED:
DPR/G. DEPT.: ENG. DEPT.:

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CERTIFIED BY: DATE:

TR-2200 FAULT RECORDER
AC/DC POWER DISTRIBUTION - DFR1
MODIFICATION AT IBN ZAHR S/S
JUBAIL SAUDI ARABIA

JOB ORDER NO.	INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.
3-1213004	P	X43	ED-305945	24 of 24	00

1105-211_24.DWG
SEC-ERB CAD-A (2002/04)
DMS VECTOR Code03

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